Abstract

Rubber compositions comprising a precipitated silica with the following physicochemical properties:

BET surface area	$35 \text{ to } 350 \text{ m}^2/\text{g}$
BET/CTAB surface area ratio	0.8 to 1.1
Pore volume, PV	1.6 to 3.4 ml/g
Silanol group density (V ₂ =	6 to 20 ml
NaOH consumption)	
Average aggregate size	250 to 1500 nm
CTAB surface area	$30 \text{ to } 350 \text{ m}^2/\text{g}$
DBP value	150 to 300 ml/100 g
V ₂ /V ₁ by Hg porosimetry	0.19 to 0.46
DBP/CTAB	1.2 to 3.5.